Figure 1

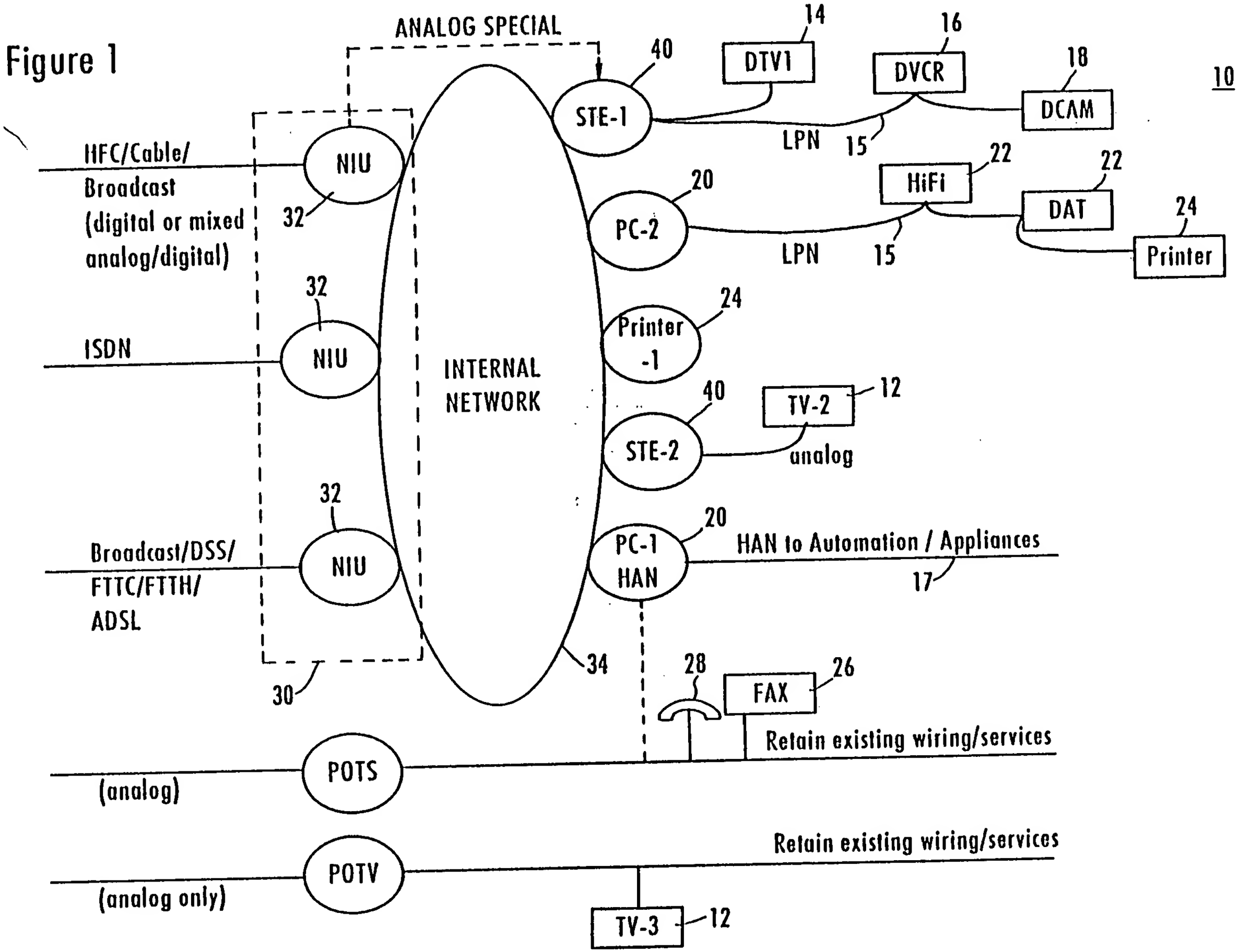

ANALOG SPECIAL
10
HFC/Cable/
Broadcast
(digital or mixed
analog/digital)
ISDN
Broadcast/DSS/
FTTC/FTTH/
ADSL
NIU
NIU
NIU
32
32
32
30
INTERNAL
NETWORK
34
STE-1
40
DTV1
14
DVCR
16
DCAM
18
LPN
15
PC-2
20
HiFi
22
DAT
22
Printer
24
LPN
15
Printer
-1
24
STE-2
40
TV-2
12
analog
PC-1
HAN
20
HAN to Automation / Appliances
17
28
FAX
26
Retain existing wiring/services
POTS
(analog)
Retain existing wiring/services
POTV
(analog only)
TV-3
12

Figure 2

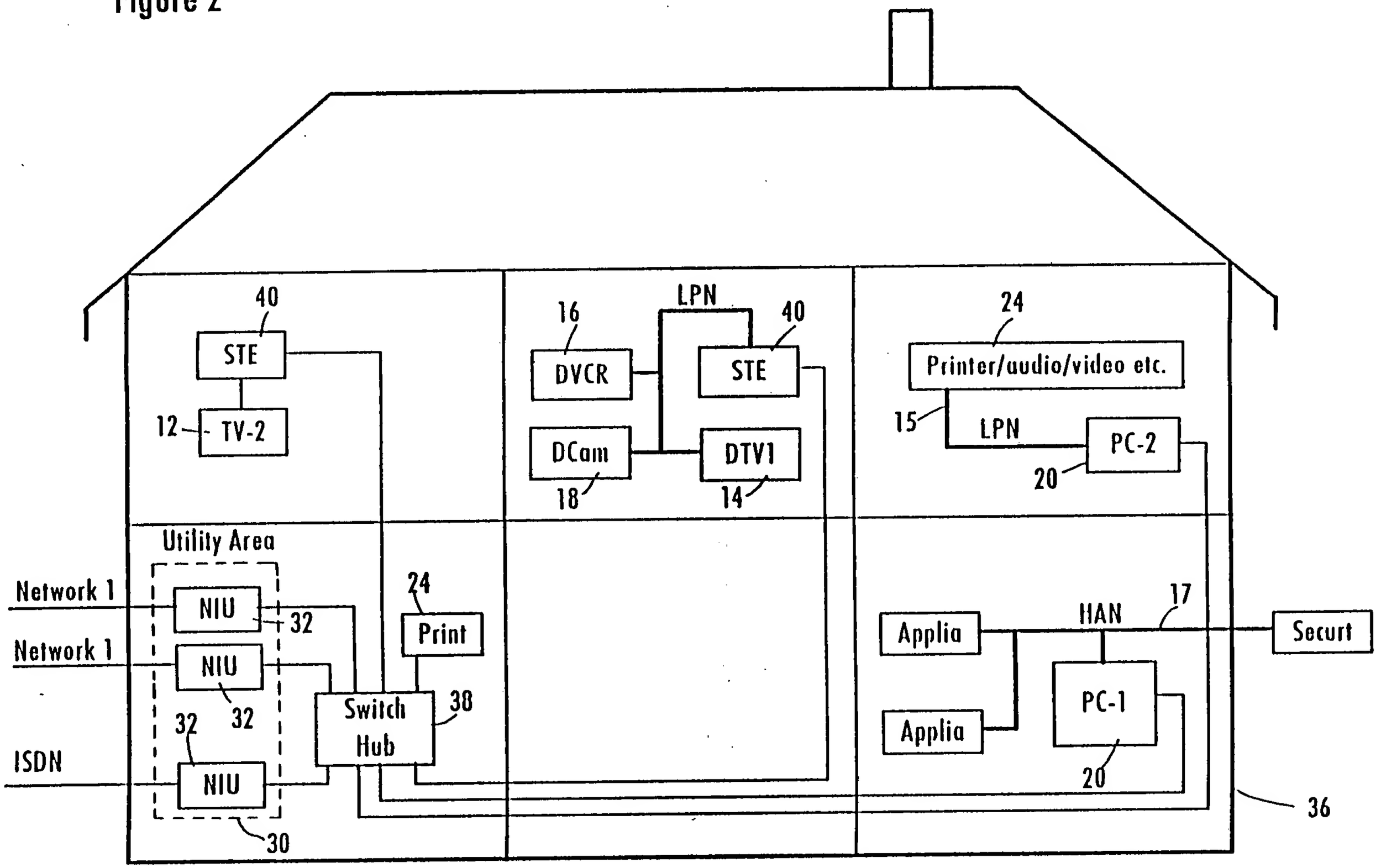

40
STE
12
TV-2
16
DVCR
LPN
40
STE
DCam
18
DTV1
14
24
Printer/audio/video etc.
15
LPN
PC-2
20
Utility Area
Network 1
NIU
32
24
Print
Network 1
NIU
32
32
Switch
Hub
38
ISDN
NIU
30
Applia
HAN
17
Securt
Applia
PC-1
20
36

Figure 3

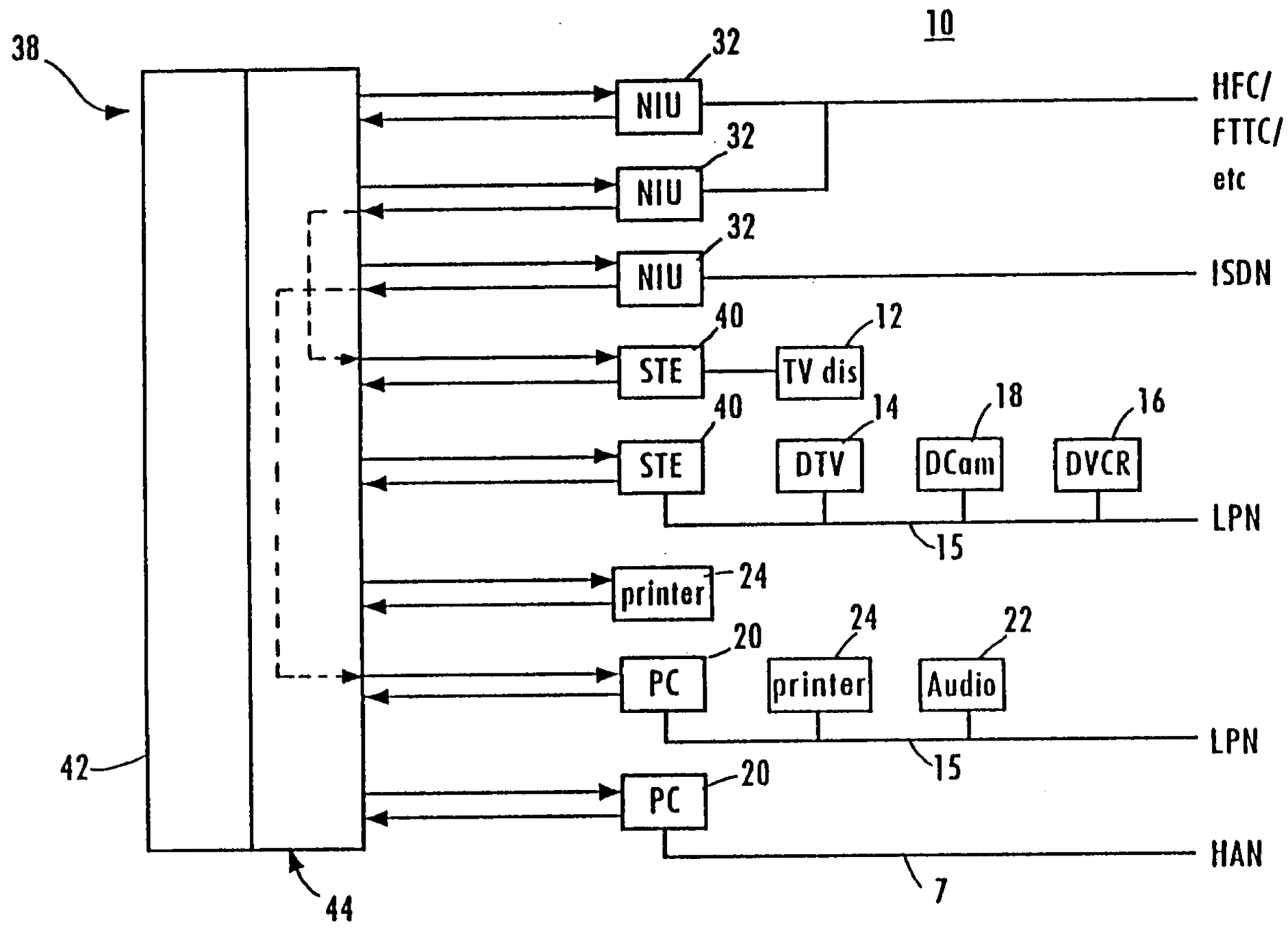

10
38
32
NIU
HFC/
FTTC/
etc
32
NIU
32
NIU
ISDN
40
STE
12
TV dis
40
STE
14
DTV
18
DCam
16
DVCR
LPN
15
printer
24
20
PC
24
printer
22
Audio
LPN
15
42
20
PC
HAN
7
44

Figure 4

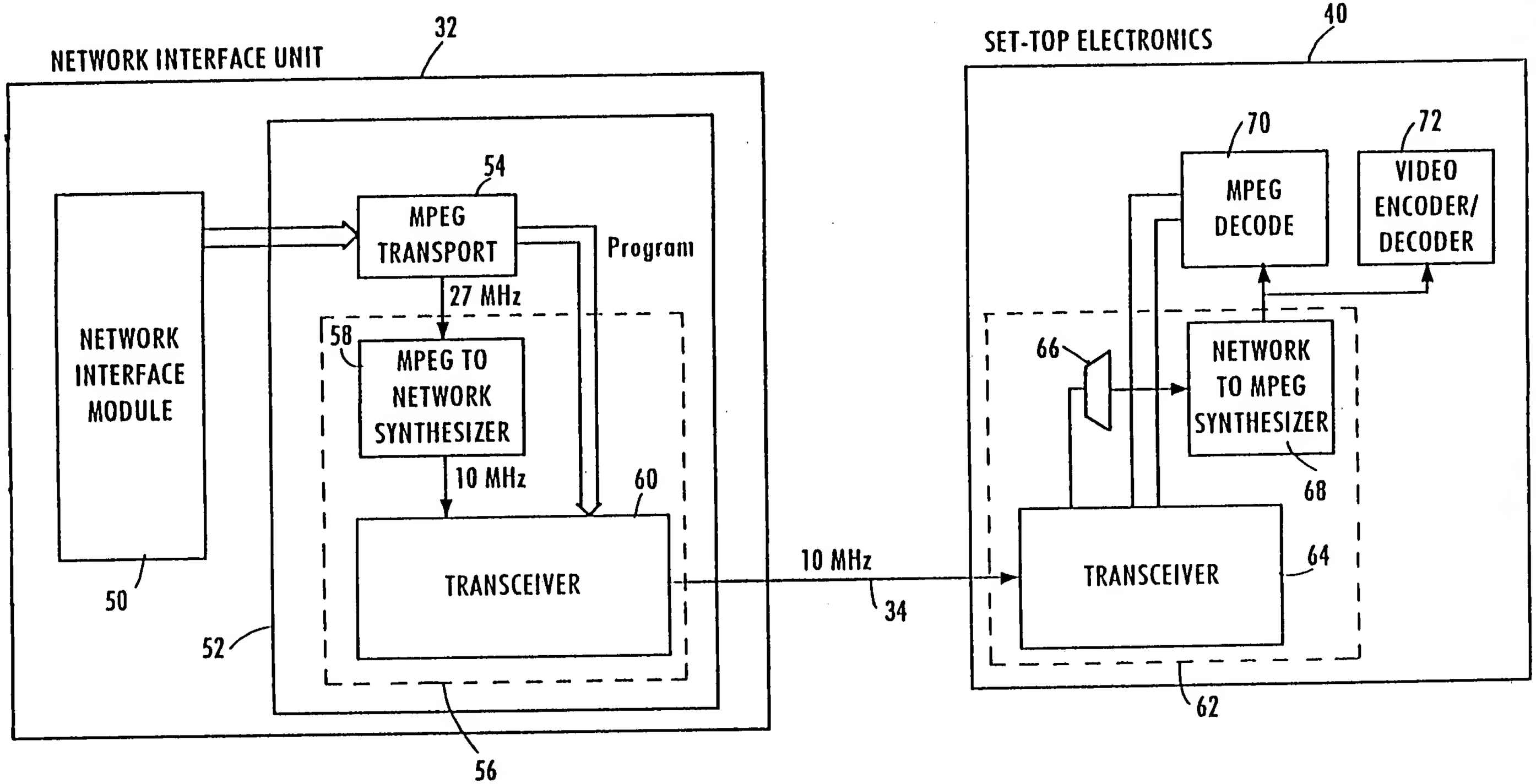
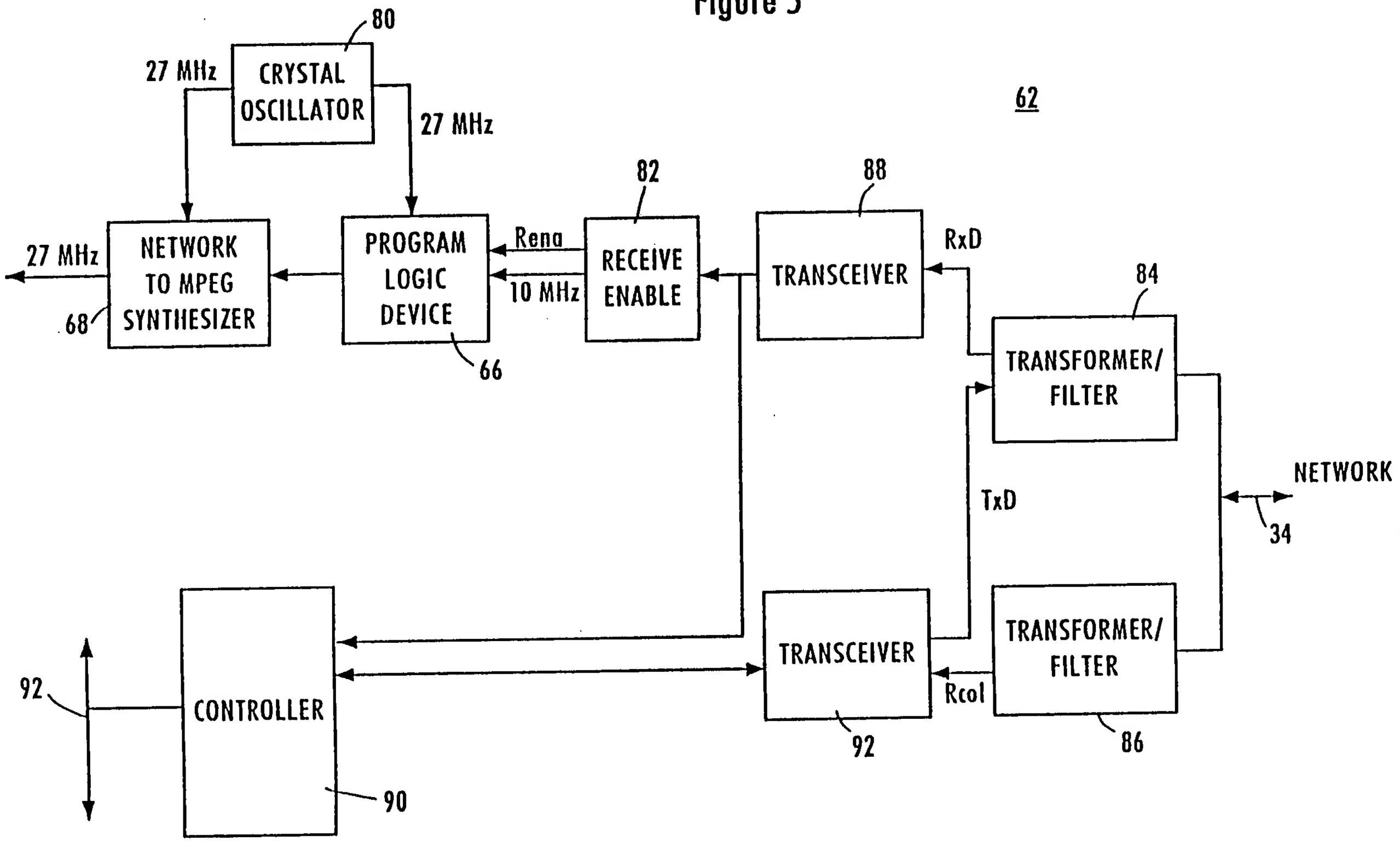
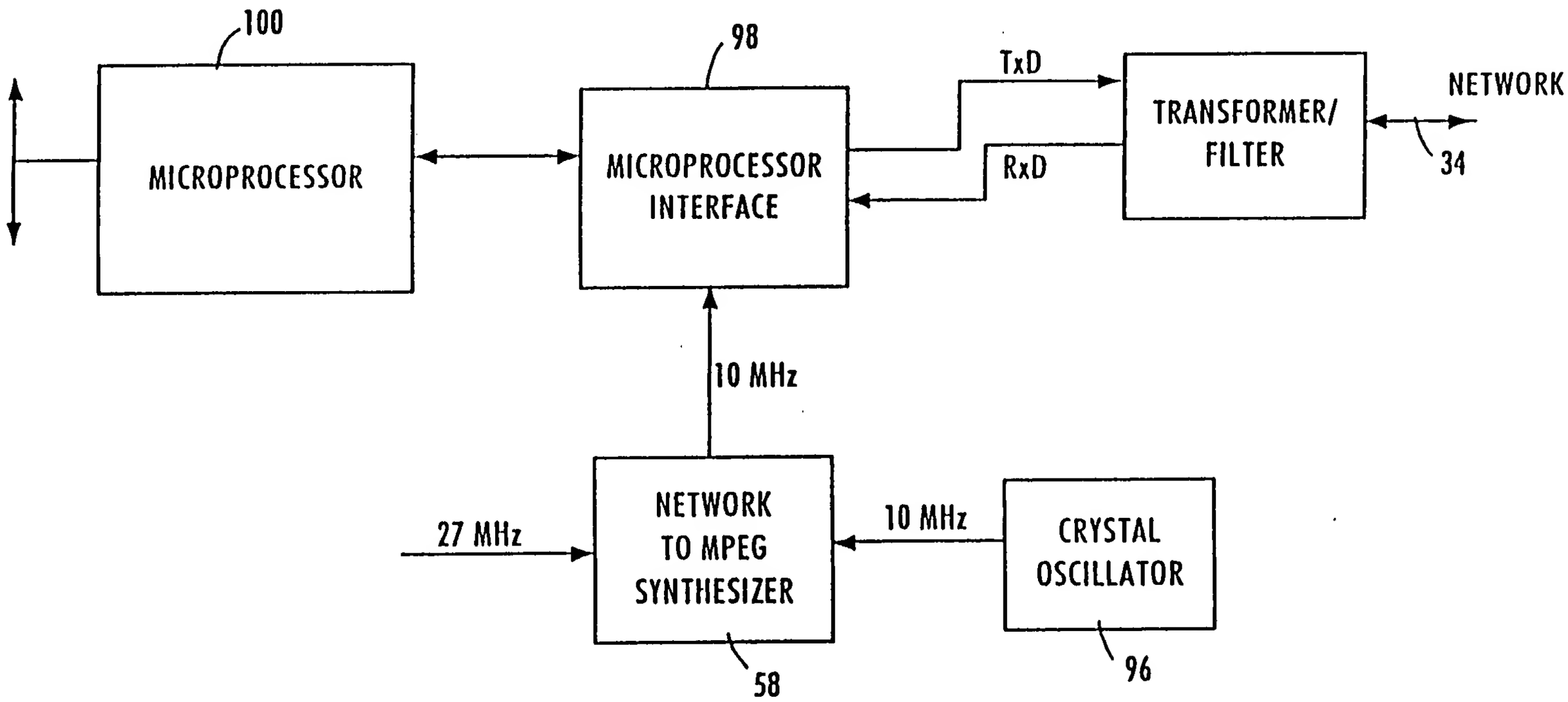

NETWORK INTERFACE UNIT
32
NETWORK INTERFACE MODULE
50
54
MPEG TRANSPORT
Program
27 MHz
58
MPEG TO NETWORK SYNTHESIZER
10 MHz
60
TRANSCEIVER
52
56
10 MHz
34
SET-TOP ELECTRONICS
40
70
MPEG DECODE
72
VIDEO ENCODER/ DECODER
66
NETWORK TO MPEG SYNTHESIZER
68
TRANSCEIVER
64
62

Figure 5


80
27 MHz
CRYSTAL OSCILLATOR
27 MHz
62
82
88
27 MHz
NETWORK TO MPEG SYNTHESIZER
68
PROGRAM LOGIC DEVICE
66
Rena
10 MHz
RECEIVE ENABLE
TRANSCEIVER
RxD
84
TRANSFORMER/ FILTER
NETWORK
34
TxD
TRANSCEIVER
TRANSFORMER/ FILTER
Rcol
92
86
92
CONTROLLER
90

56

Figure 6


100
MICROPROCESSOR
98
MICROPROCESSOR INTERFACE
TxD
RxD
TRANSFORMER/ FILTER
NETWORK
34
10 MHz
27 MHz
NETWORK TO MPEG SYNTHESIZER
58
10 MHz
CRYSTAL OSCILLATOR
96

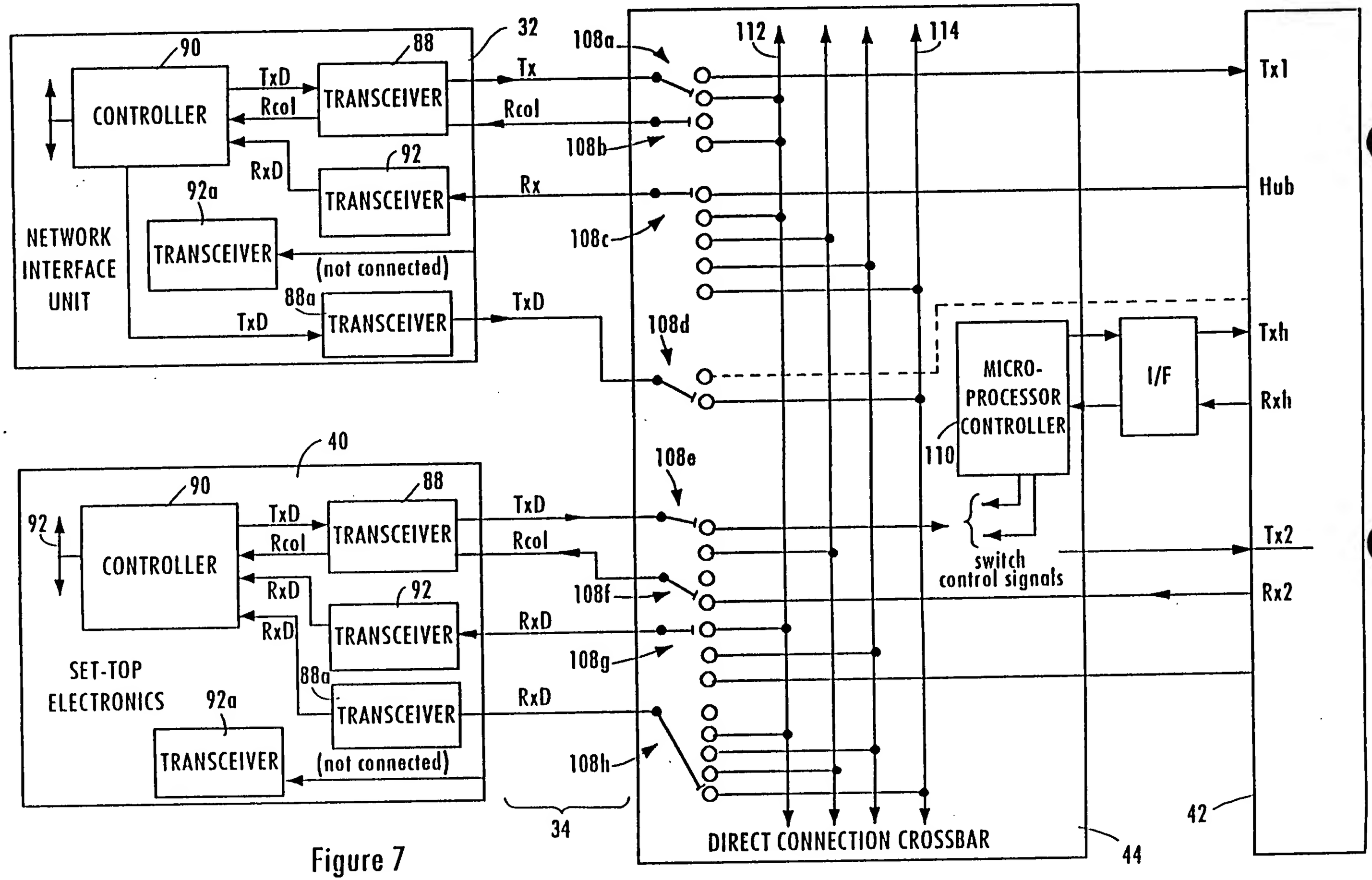
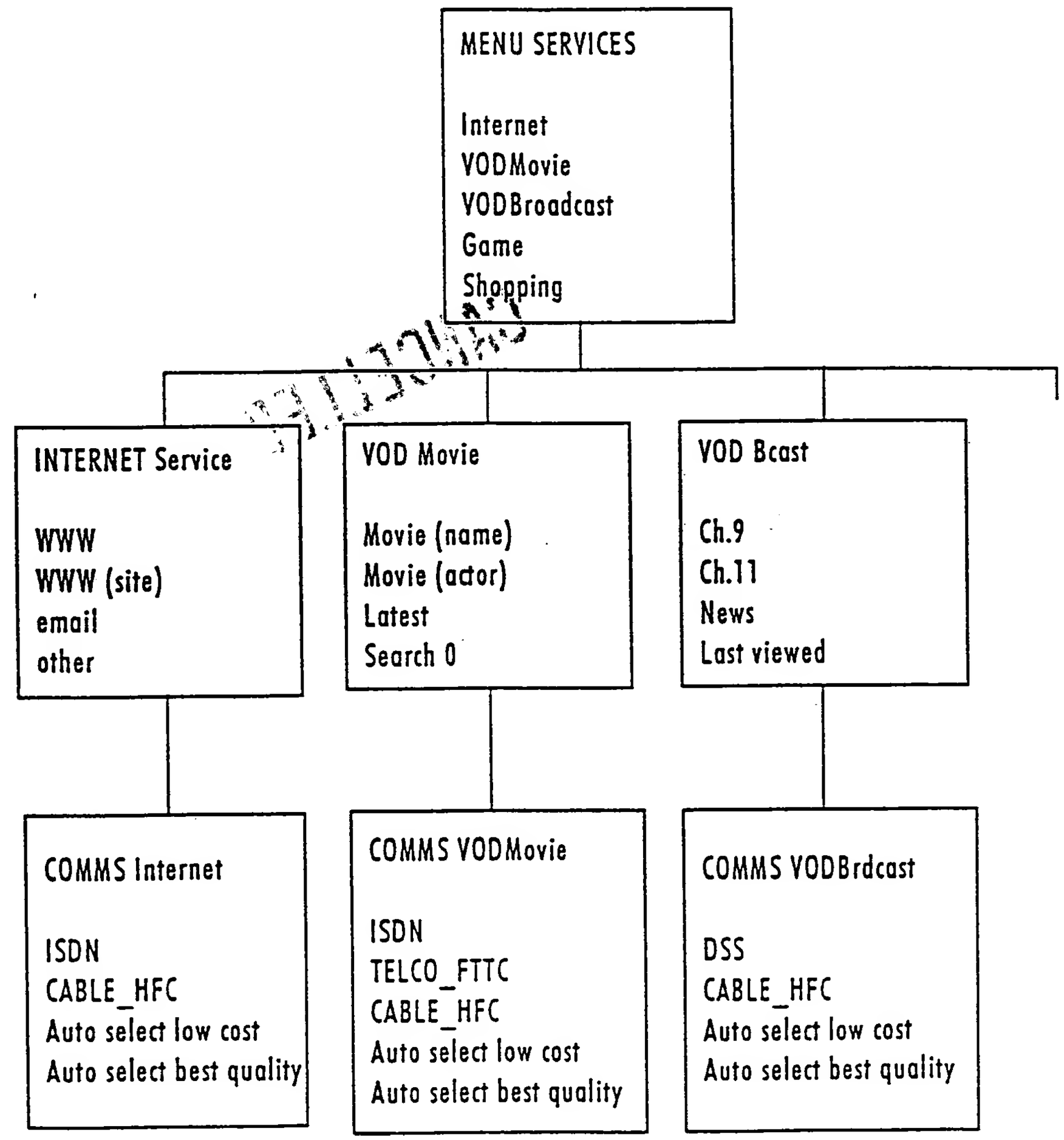

32
108a
112
114
Tx1
90
88
CONTROLLER
TxD
Rcol
TRANSCEIVER
Tx
Rcol
108b
92
RxD
92a
TRANSCEIVER
Rx
Hub
NETWORK INTERFACE UNIT
108c
TRANSCEIVER
(not connected)
88a
TxD
TRANSCEIVER
TxD
108d
Txh
MICRO-PROCESSOR CONTROLLER
I/F
Rxh
110
40
108e
90
88
92
CONTROLLER
TxD
Rcol
TRANSCEIVER
TxD
Rcol
Tx2
switch control signals
108f
RxD
92
RxD
TRANSCEIVER
RxD
Rx2
108g
SET-TOP ELECTRONICS
88a
92a
TRANSCEIVER
RxD
TRANSCEIVER
(not connected)
108h
42
34
DIRECT CONNECTION CROSSBAR
44

Figure 7

Figure 8


MENU SERVICES
Internet
VODMovie
VODBroadcast
Game
Shopping
INTERNET Service
WWW
WWW (site)
email
other
VOD Movie
Movie (name)
Movie (actor)
Latest
Search 0
VOD Bcast
Ch.9
Ch.11
News
Last viewed
COMMS Internet
ISDN
CABLE_HFC
Auto select low cost
Auto select best quality
COMMS VODMovie
ISDN
TELCO_FTTC
CABLE_HFC
Auto select low cost
Auto select best quality
COMMS VODBrdcast
DSS
CABLE_HFC
Auto select low cost
Auto select best quality